EXHIBIT EB-1

Responses to first set of interrogatories from the Carolinas Clean Energy Business Association ("CCEBA")



prepared by London Economics International LLC

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In responding to each of the below Interrogatories, please refer to page 51 of the LEI report which, in addressing operating reserve requirements, states "DESC witness Mr. Bell recognizes that "[w]hile it is true that Guidehouse identified additional operating reserves higher than DESC has historically used, the study establishes that additional reserves are needed due to the intermittent nature of solar energy generation and the increasing levels of solar penetration into the DESC system." The Report cites to the Rebuttal Testimony of Eric H. Bell on behalf of Dominion Energy South Carolina, Inc., p. 3.

CCEBA-1:

Does LEI agree with ORS Witness Horii's testimony concluding that "Guidehouse has not justified their forecast of incremental operating reserves needed to accommodate solar forecast uncertainty?" Horii Direct at p. 8, lines 15 – 17.

Response 1:

LEI believes the matter of incremental operating reserves and determining an appropriate level going forward should be subject to an independent review, as recommended in our Independent Report. For example, see page 54 which states: "LEI believes that the extent of contrary evidence introduced regarding the VIC analysis supports the need for a truly independent study. Such a study should be conducted through a collaborative (as opposed to adversarial) process, where the inputs, assumptions, and methodological approach can be the subject of stakeholder consultation and feedback."

LEI further recognizes that the Commission has opened Docket No. 2020-219-A in response to Section 58-37-60 of the South Carolina Code, which authorizes the Commission and the Office of Regulatory Staff to initiate an independent study. As stated in our Independent Report, LEI finds this to be "an appropriate avenue through which to conduct an updated VIC study that involves stakeholders from the outset of the analysis" and "recommends that the Commission or ORS begin the process to conduct such a study as soon as practicable." (p. 54)

CCEBA-2:

Has LEI reviewed all the workpapers supporting Section 4 of the Guidehouse study, titled "Demonstrating the Need for Additional Reserves," including workpapers provided in response to CCEBA Interrogatory 2-14?

Response 2:

As discussed in Response 1 above, LEI found that given the extent of contrary evidence introduced regarding the VIC analysis, an independent, fully-stakeholdered study should be commissioned. LEI also recommended that in the meantime "the best approach is to continue with the VIC at the current interim

London Economics International LLC 717 Atlantic Avenue, Suite 1A Boston, MA 02111 www.londoneconomics.com level of \$0.96/MWh subject to true up or down based on the results of a comprehensive independent study." (p. 56 of the Independent Report)

LEI's review of workpapers provided in response to CCEBA Interrogatories was sufficient to reach the conclusion that an independent study is necessary. LEI's mandate is to review avoided cost methodologies and calculations; the VIC is not an avoided cost, but a charge that is applicable to a subset of qualifying facilities. Any assessment of assumptions related to the VIC needs to be performed in conjunction with a systematic independent study, rather in isolation.

CCEBA-3:

Has LEI reviewed the workpaper entitled and produced as "CCEBA Discovery Request 2-14 973 noInc Reserves.xlsx" which reflects Guidehouse's simulation of DESC's system without any additional operating reserves?

Response 3:

Please see Response 2 above.

CCEBA-4:

Within "CCEBA Discovery Request 2-14 973 noInc Reserves.xlsx" has LEI reviewed the formulas contained within the "Hourly Summary" tab, Column G, which is labeled "Risk of Solar Shortfall"?

Response 4:

Please see Response 2 above.

CCEBA-5:

Does LEI agree that this formula calculates the risk of a simultaneous 60% drop in solar production across all of DESC's solar facilities? If so, does LEI believe a 60% drop in solar production across all of DESC's solar facilities is a realistic assumption?

Response 5:

Please see Response 2 above.

CCEBA-6:

Does LEI believe the formula in column G accurately represents the geographic diversity of variability in solar production?

Response 6:

Please see Response 2 above.

Does LEI believe the Guidehouse study demonstrates that a 60% potential CCEBA-7:

drop in solar production should be assumed rather than DESC's current

operating practice of 40%?

Response 7: Please see Response 2 above.

Has LEI reviewed Mr. Burgess' workpaper labeled "CCEBA Discovery CCEBA-8:

Request 2-14 973 noInc Reserves EB.xlsx", which is a modified version of

the Guidehouse workpaper that replaces the 60% value with a 40% value?

Please see Response 2 above. Response 8:

Does LEI have any reason to disagree with Mr. Burgess's analysis in the CCEBA-9:

above workpaper that when the 40% value is modeled, there is no occurrence of a Reserve Shortfall in any hour prior to 2029? (note that the original Guidehouse workbooks contained formula errors for years 2029 and later, which Mr. David acknowledged, so these years should be

excluded from evaluation).

Please see Response 2 above. Response 9:

Has LEI reviewed or analyzed the workpapers produced by DESC in CCEBA-10:

response to CCEBA Interrogatory 1-4, which provide historical operating reserves on DESC's system, to determine whether the current level of reserves DESC normally carries has been insufficient to accommodate solar

variability for Tranche 1?

Please see Response 2 above. Response 10:

For the following Interrogatories, please refer to the LEI Report at page 56. On that page, LEI states: "However, if the Commission believes that it must set a fixed VIC as part of this proceeding, LEI concurs with Mr. Horii that DESC's proposed VIC for Tranche 1 of \$1.80/MWh may be a reasonable value."

Does LEI agree that Mr. Horii's primary rationale for making this CCEBA-11:

recommendation was the fact that a separate utility, Duke Energy Progress, has an integration charge that is "in the same ball park" as the Tranche 1

VIC calculated by DESC?

Mr. Horii in his oral testimony stated "if you're looking at using numbers that are Response 11:

in the current docket, then, \dots although my recommendation was to not adopt DESC's

... current value ... if you're not going to do [the independent VIC study], then I'd recommend you use the [\$1.80/MWh] number. And I base that on ... if I look at the numbers for [Duke Energy Progress] – although they are a different system, they are, I think, fairly similar. You know, their current VIC is [\$2.39/MWh]. So, ... the [\$1.80/MWh] number of Dominion is kind of in the same ballpark as what's out there currently for DEP. And it's also fairly close, although lower, than what I had previously proposed ... the [\$2.29/MWh] number ... which was initially ... adopted in the original ... Dominion 2019 case before the rehearing that adopted to [\$0.96/MWh] number."1

LEI believes that the consistency between the proposed VIC of \$1.80/MWh and the levels established in the 2019 Duke proceeding was one reason, but Mr. Horii uses the word "base[d] on"; he did not say "primary". LEI also notes that this recommendation was made only in the event that an independent VIC study is not commissioned.

CCEBA-12:

Did LEI review Mr. Burgess' workpapers labeled "Guidehouse VIC Calculation Workbook 341-973 MW 06.07.21 - EB" and "Guidehouse VIC Calculation Workbook 974-1073 MW 06.07.21 - EB"?

Response 12:

Please see Response 2 above.

CCEBA-13:

Does LEI agree that Mr. Burgess' workpapers rely upon the same methodology of the completed Guidehouse VIC study except for limited modifications to the final VIC calculation, such as weighting based on hourly solar production?

Response 13:

Please see Response 2 above.

CCEBA-14:

Does LEI have any reason to believe that Mr. Horii reviewed Mr. Burgess'

workpapers prior to Mr. Horii making his recommendation?

Response 14:

LEI has no knowledge of what Mr. Horii did or did not review prior to making

his recommendation.

¹ Southern Reporting, Inc. Transcript of Testimony and Proceedings, Volume 6 (Docket No. 2021-88-E, Hearing #11947). August 25, 2021. P. 97-98.

CCEBA-15: Does LEI believe the hourly weighting approach used in Mr. Burgess'

workpapers is more or less accurate than the constant weighting approach

Guidehouse's original workpapers used?

Response 15: Please see Response 2 above.

CCEBA-16: Does LEI agree that the application of an hourly weighting approach would

yield a VIC lower than \$1.80? If so, what is that value? If not, why not?

Response 16: Please see Response 2 above.